

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of reducing the effects of second order intermodulation distortion in a zero-IF receiver, comprising: receiving an RF signal, modulating the RF signal to provide one or more baseband signals, detecting an occurrence of intermodulation distortion within the one or more baseband signals, and selectively enabling a wide mode of a wide-notch filter having a predetermined wide mode and a normal mode, said wide mode having a wider frequency range than said normal mode; for attenuating signal components of the one or more baseband signals within the predetermined wide mode frequency range of the wide-notch filter, ~~based on the occurrence of~~ to reject the second order intermodulation distortion, wherein detecting the occurrence of intermodulation distortion comprises determining a plurality of signal strength measures, and determining the occurrence of intermodulation distortion based on a relationship among the plurality of signal strength measures, ~~the plurality of signal strength measures comprising an RSSI measure and an Eb/Nt measure and determining the occurrence of intermodulation distortion if the Eb/Nt measure is below a first threshold value when the RSSI measure is above a second threshold value.~~

2. (Previously Presented) The method of claim 1, wherein the predetermined wide mode notch-width is approximately +/-60 kHz, and approximately centered at zero-Hertz.

3. (Previously Presented) The method of claim 1, further including detecting a cessation of the intermodulation distortion, and selectively disabling the wide mode of the wide-notch filter, based on the cessation of the intermodulation distortion.

4-5. (Canceled)

6. (Previously Presented) The method of claim 5, further including selectively disabling the wide mode of the wide-notch filter when the E_b/N_t measure substantially increases.

7. (Original) The method of claim 4, wherein the plurality of signal strength measures include: an RSSI measure, and an RF energy measure; and determining the occurrence of intermodulation distortion if the RSSI measure is below a first threshold value when the RF energy measure is above a second threshold value.

8. (Original) The method of claim 4, wherein the plurality of signal strength measures include: a first measure of energy in a first frequency band of the one or more baseband signals, and a second measure of energy in a second frequency band of the one or more baseband signals, the second frequency band being higher than the first frequency band; and determining the occurrence of intermodulation distortion if the first measure of energy is substantially higher than an estimated first measure of energy corresponding to the second measure of energy absent intermodulation distortion.

9. (Previously Presented) The method of claim 1, further including disabling the wide mode of the wide-notch filter, based on a duration since enabling the wide mode of the wide-notch filter.

10. (Currently Amended) A receiver comprising: a mixer that is configured to convert a received RF signal to an analog baseband signal, a detector that is configured to assert a detection signal when intermodulation distortion is detected in the analog baseband signal, a wide-notch filter having a predetermined wide mode and a normal mode, said wide mode having a wider frequency range than said normal mode, said filter being operably coupled to the mixer and the detector, ~~that is the detector configured for activating to activate~~ the wide mode of the wide-notch filter for selectively attenuating second order intermodulation distortion signal components in the analog baseband signal when the detection signal is asserted, and a baseband

processor that is configured to receive the analog baseband signal and to provide therefrom a receiver output, wherein the baseband processor is further configured to provide digital measures of signal strengths in the analog baseband signal, and the detector is operably coupled to the baseband processor and is configured to detect the intermodulation distortion in the analog baseband signal based on the digital measures of signal strengths from the baseband processor; ~~the digital measures of signal strengths comprising an RSSI measure and an Eb/Nt measure; and the detector asserts the detection signal when the Eb/Nt measure is below a first threshold value and the RSSI measure is above a second threshold value.~~

11. (Previously Presented) The receiver of claim 10, wherein the wide-notch filter is configured to selectively attenuate signal components within approximately ± 60 kHz of zero-Hertz when the detection signal is asserted.

12. (Previously Presented) The receiver of claim 10, wherein the detector is further configured to de-assert the detection signal to activate the normal mode of the wide-notch filter based on a duration since asserting the detection signal.

13-14. (Canceled)

15. (Previously Presented) The receiver of claim 14, wherein the detector de-asserts the detection signal to activate the normal mode of the wide-notch filter when the Eb/Nt measure substantially increases.

16. (Previously Presented) The receiver of claim 10, wherein the detector is configured to detect the intermodulation distortion in the analog baseband signal based on: a first measure of signal strength in the analog baseband signal, and a second measure of signal strength in the received RF signal; and the detector asserts the detection signal for activating the wide mode of the wide-notch filter when the first measure is below a first threshold value and the second measure is above a second threshold value.

17. (Previously Presented) The receiver of claim 10, wherein the detector is configured to detect the intermodulation distortion in the analog baseband signal based on: a first measure of energy in a first frequency band of the analog baseband signal, and a second measure of energy in a second frequency band of the analog baseband signal, the second frequency band being higher than the first frequency band; and the detector asserts the detection signal for activating the wide mode of the wide-notch filter when the first measure of energy is substantially higher than an estimated first measure of energy corresponding to the second measure of energy absent intermodulation distortion.

18. (Previously Presented) The receiver of claim 17, wherein the baseband processor is further configured to provide the first and second measures of energy to the detector.

19. (Previously Presented) The receiver of claim 10, wherein the received RF signal is a quadrature-modulated signal, and the mixer is configured to provide a pair of quadrature signals that comprise the analog baseband signal.

20. (Previously Presented) The receiver of claim 10, wherein the filter is a digital filter that is included within the baseband processor.

21. (New) The method of claim 1, wherein the plurality of signal strength measures comprise an RSSI measure and an E_b/N_t measure, and determining the occurrence of intermodulation distortion comprises determining if the E_b/N_t measure is below a first threshold value when the RSSI measure is above a second threshold value

22. (New) The receiver of claim 10, wherein the digital measures of signal strengths comprise an RSSI measure and an E_b/N_t measure; and the detector asserts the detection signal when the E_b/N_t measure is below a first threshold value and the RSSI measure is above a second threshold value